

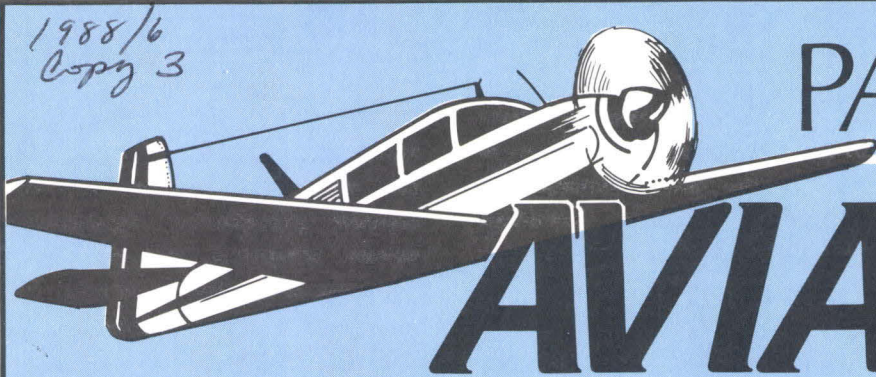
Ar 825  
3.P15

S. C. STATE LIBRARY

JUN 9 1988

PALMETTO

STATE DOCUMENTS



Volume 40, Number 4

Published by the S.C. Aeronautics Commission

June, 1988

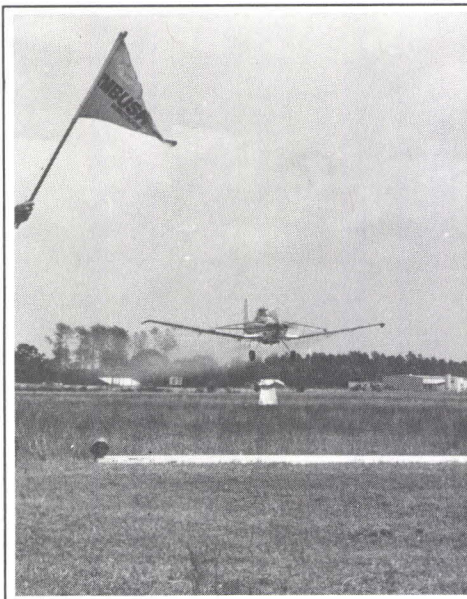
## Aerial Applicators Continue Their Education To Improve S.C.'s Agriculture

Farmers and environmentalists should be pleased with South Carolina's aerial applicators. They are voluntarily going to great lengths to be educated in all aspects of their craft.

Aerial applicators are becoming more literate in today's ever-advancing technologies by attending voluntary South Carolina Agricultural Aviation Association clinics held throughout the state taught by Clemson University.

Dr. Mac Horton, Extension Entomologist, and Dr. Francis Wolak, Extension Agricultural Engineer, from Clemson both agreed that today's aerial applicators are interested in doing a good job.

"They come here on an indi-



South Carolina is one of a few states which conducts calibration fly-ins for aerial applicators.

vidual basis," said Horton. "They're all trying to help the pilots to be legal, and the farmer to get exactly what he's paying for."

"There's no law that says these pilots have to come to these sessions; there's nothing that says they have to improve their professionalism and proficiency, but they do it anyhow. They do it voluntarily because it helps them and their clients," said Horton.

This voluntary program titled Operation SAFE (Self-regulating Application and Flight Efficiency) by the National Agricultural Aviation Association is a comprehensive program of education, professional analysis of application and encourages safety concerns in the industry. Not only does the SAFE program offer many advantages to the operator, but also increases safety and reduces health and environmental risks.

South Carolina and North Carolina are the first states to hold official fly-in calibration programs, said Horton, but many states are learning the benefits of the programs and will begin theirs in the near future.

An Aircraft Calibration Fly-In was held recently at the Barnwell County Airport to assist aerial applicators with their spraying

*See Applicators, Page 4*

### Charleston Director Named to Regional Post

Sam Hoerter, Director of Airports for the Charleston County Aviation Authority, has been elected president of the Southeast chapter — American Association of Airport Executives (SEC-AAAE) at its annual meeting in Louisville, KY.

Hoerter has been actively involved with the organization since its inception in 1983 and has held numerous offices in the chapter.

The Southeast chapter —

AAAE is comprised of over 400 airport executives and other aviation professionals in twelve southeastern states.

The organization is dedicated to the improved development and operation of the region's airports and is affiliated with the American Association of Airport Executives, founded in 1928.

The 1989 annual meeting of the SEC-AAAE will be held in Charleston in March 1989.





**PALMETTO AVIATION** is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities, and to keep readers abreast of national and international trends in aviation.

The Aeronautics Commission is a state agency created in 1935 by the South Carolina General Assembly to foster and promote air commerce in the state.

**Carroll A. Campbell**  
Governor

**Commissioners:**

Edwin S. Pearlstine, Jr., Chairman  
Charleston

Jimmie L. Hamilton, Vice Chairman  
Columbia

Fred Eugene Rachels  
Chester

Curtis Graves  
Denmark

Richard McClellion  
Anderson

Wallace A. Mullinax, Sr.  
Greenville

Charles Appleby  
Florence

**Ex-Officio Members:**

Sen. Isadore Lourie  
Columbia

Rep. Olin R. Phillips  
Gaffney

**Staff:**

John W. Hamilton  
Director

Helen F. Munnerlyn  
Editor

## New Engineer at S.C. Aeronautics

Bill Walls, a native of South Carolina, is the newest addition to the staff of the state Aeronautics Commission's Airport Development division.

Walls comes to the commission with over forty years experience in engineering with a special emphasis in asphalt, and concrete bases.

"I'm looking forward to getting involved with the grant administration and monitoring of the quality assurance practices throughout the state," Walls said. "So far, there hasn't been a dull moment in the office."

Walls is in charge of monitoring quality control of state aviation projects and is responsible for all state grant administration.

Before joining the Aeronautics Commission, Walls was employed for the past 12 years with Enwright Associates of Greenville and Prime Associates of Columbia.

Walls has been responsible for numerous construction engineering projects, including extensive

paving jobs, the placement of cement treated bases, plant mixed and road mixed bases, as well as asphalt placement, rejuvenation, heater planning, pre-mixing and relaying of asphalt concrete.

He also has constructed projects for towns of Lake City, Harleyville, Ridge Spring and for Richland County. In addition, he completed work on the 100,000 sq. ft. Liberty Life building in Charleston, a ten-story rack building in Nashville, TN, and did special structural work on the Clemson Stadium.

Walls is also very involved with the Civil Air Patrol, South Carolina Wing, and currently serves as Chief of Staff.

He earned a degree in engineering and has attended Clemson University, Heald's Engineering College, Chabot, Ohlone and Pacific College all of California.

He enjoys fishing when he is not busy, and admits he was not busy for a weekend about five years ago.

## Eagle Aviation Announces Staff Changes

Two new staff additions have been announced by Eagle Aviation in Columbia.

John Waldrop of Pensacola, FL and James (Jim) Skinner of Lexington have begun their new maintenance duties at Eagle.

Waldrop, 34, will be the Director of Maintenance with duties to include overseeing all functions of the maintenance department.

Skinner, 43, will be the Eagle East's Maintenance Supervisor. He is in charge of all piston aircraft maintenance.

Waldrop has over 14 years in the aviation industry with

experience in management and technical skills. He attended Pensacola Junior College and received a degree in Aviation Maintenance Technology at Vincennes University.

Skinner has been with Eagle since 1986, and has over 19 years in total aviation experience. He served four years in Strategic Air Command in the U.S. Air Force where he held secret security clearance. He also served as aircraft mechanic for Boeing B-52 and KC-135 type aircraft.

He received his AI from the FAA in 1974.

South Carolina Aeronautics Commission Offices are at Columbia Metropolitan Airport. Mailing Address: Post Office Drawer 1987, Columbia, South Carolina, 29202. Phone: (803) 739-5400.



# It's the Season for Air Shows !

Nearly every weekend of warm weather there are major events which espouse all the concepts that every community festival holds dear: family entertainment.

Air shows are good examples of fun, enjoyable family entertainment held frequently around the state and are as diversified as the communities around them.

Last month, air shows were held at Shaw AFB in Sumter, Bryant Field Airport in Rock Hill, and Charleston AFB, just to name a few.

The New Horizons Air Show at Bryant Field was held to raise charitable funds for the York County Mental Retardation Board.

In its second year, this air show entertained over 10,000 people and featured Flag Jumpers, aerobatics and wing-walking acts.

If the overhead feats did not impress the crowds, there were arts and crafts, free airplane, helicopter and balloon rides and a children's tent to keep them occupied.

Shaw AFB and Charleston AFB both opened their bases to the public in May and saw large crowds.

Charleston AFB had an estimated 120,000 people walk through their gates, according to Maj. Thomas J. Danielson, Open

House Project Officer, and Shaw had approximately 60,000 at Shawfest, according to Staff Sgt. Detroit Whiteside.

Featured at Shaw's static displays were various aircraft including a V-8 Harrier, with vertical take off and landing, and a D-4 Sikorsky Helicopter.

Charleston AFB "had a C-5 Galaxy, two C-141s, also a TC-135 which is an aerial tanker designed to refuel other aircraft in flight," said Danielson.

All of the air shows included vintage aircraft. People attending shows saw a variety of planes such as P-51s, T-6s, a T-34 and a T-28.

While some people came to soak up the sun the majority endured long lines and hot weather to see the Air Force Thunderbirds and the Navy Blue Angels.

The Blue Angels and the Thunderbirds excite neophytes as well as experienced aviators who all are amazed at how close, fast and precise the sophisticated jets can fly.

Having an air show and open house, "is a public relations event for the community, and it's a moral boost just to open the base and it's also a recruiting activity. It has an impact on all ages from potential recruits to six-year-olds," explained Danielson.



## Aviation Calendar

### June 8

USAF Thunderbirds  
US Army Golden Knights  
Myrtle Beach AFB

### June 12

Breakfast Club  
Sumter Municipal Airport

### June 26

Breakfast Club  
Clarendon Cty. Airport

### July 1-4

Freedom Weekend Aloft  
Hot Air Balloons  
US Army Golden Knights  
Donaldson Center  
Greenville, SC

### July 3

Breakfast Club  
Golden Anniversary  
Camden Airport

### July 10

Breakfast Club  
Greenwood Airport

### July 24

Breakfast Club  
Augusta Daniel Field

### July 23-24

Kim Pearson Airshows  
Beaufort, SC

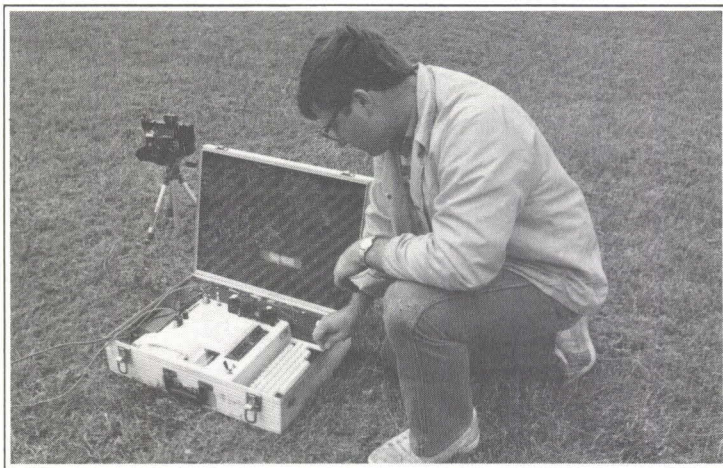


Static displays are just some of the features which attract thousands each year to air shows.



Precision flying teams such as the Blue Angels are usually the main attractions at the shows.





Dr. Francis Wolak adjusts the computer which inputs data on the elements at the center line.



Dr. Mac Horton feeds a test tape into the fluorometer, a machine that measures the spray.

## Applicators' fly-in helps more than just the pilots

*Continued from Page 1*

equipment and gave pilots an opportunity to discuss current problems with each other.

Most problems occur when the spray material is taken around the plane and goes into the atmosphere, instead of on the ground, or when nozzles are too far out and the spray goes up.

The calibration fly-in is aimed mostly at the proper application of chemicals and putting things in a uniform manner, said Wolak. Other sessions taught by Clemson University deal with which chemicals to use for a particular agricultural problem.

Upon arriving at the fly-in, pilots are briefed on the schedule of events for their calibration and how to properly fly over the equipment which will monitor their spray application systems.

Planes are loaded with 60 to 120 gallons of fluorescent dye at the loader station. Then pilots are instructed to operate their spray system until booms are loaded and dye is flowing from outer nozzles.

Each plane makes three consecutive passes over equipment set up by Clemson personnel in grass near the runway. During each pass the pilot sprays dye over the designated area which is equipped with a metal stand that holds a test tape.

In addition to the test tape, there is a motion detector, a computer and a Polaroid camera set up in the spraying area. The motion detector indicates to the camera when an aircraft is spraying and the computer takes data on the direction and velocity of the wind and elements.

The camera photographs the motion on the center line and gives a clear indication of the application.

After the third pass, the test tape is taken up, marked with the applicator's name and processed through a fluorometer which measures the amount of fluorescent dye applied to the test tape.

According to Horton, it takes about 5 minutes for each test tape to run through the fluorometer which gives a line graph of the amount of dye applied to each swath tape and an additional graph which averages the three runs.

The test tape, the three Polaroid photos and the average swath graph are given to the aerial applicator for review. The applicator can opt to make an additional run if he feels he needs to or can simply take the materials home to adjust his application equipment.

Horton said, "the applicators can take this dyed paper back with

them and actually correlate it to their equipment."

During the Barnwell Fly-In, most applicators ran a 50-55 foot swath, the width of the effective spray area. But Bobby Frierson, a sky diver and nursery owner in Denmark, S.C., ran a 60-foot swath with a near-perfect alignment of applied dye.

The South Carolina Agricultural Aviation Association encourages these fly-ins that are held throughout the year to exchange the latest information and new ideas on aerial application.

It costs Clemson University about \$500 for materials for 100 passes over the calibration equipment not including personnel costs, according to Horton. But he and Wolak agree that it's worth every penny to keep people involved educated on the latest techniques, supplies and equipment.

Both Horton and Wolak said they cannot foresee a time when aerial application will become less regulated. On the contrary, said Horton, aerial applicators are doing an excellent job regulating themselves, but there will probably come a time when aerial applicators will have to be a licensed, regulated industry as chemicals and equipment become more complex.



# The Civil Air Patrol

## S.C. Wing Liaison Officer Retires



The South Carolina Wing of the Civil Air Patrol has announced the retirement of Lt. Col. Roger Rucker, USAF.

Lt. Col. Rucker presented the retirement orders during the Middle East Region Search and Rescue Competition Awards presentation.

True military customs were the rule for the ceremony which also lauded Lt. Col. Rucker for his outstanding service to the organization. The Meritorious Service Medal from the Air Force was presented for his distinguished work as Liaison Officer as well as a Certificate of Appreciation for his contributions to the CAP by the Region

The Civil Air Patrol does not rest during the summer months.

Scenes like this one are typical as the CAP participates in air shows, like the New Horizons Air Show at Bryant Field in Rock Hill.

The CAP provides aircraft for static display across the state to entertain, educate and as a recruiting tool for future CAP leaders.

Commander Col. David Ellsworth.

Lt. Col. Rucker is retiring his position after more than four years in various wings of the Civil Air Patrol in this Region, and after more than 26 years of military service. His tours included trips to Vietnam, Korea, and exchange tours with the British Royal Air Force, an instructor tour at Reese, Dover AFB (where he flew C-5's), and Headquarters Squadron Commander at Shaw AFB before accepting the Liaison Officer position.

He has currently accepted a position with Lexington High School as the Air Science Instructor for the Junior ROTC program. He will also be joining the CAP as a volunteer filling a vacancy on the Wing Staff.

### CAP Goes to Middle East Region Competition

The SC Wing CAP sponsored a team of CAP members to travel to

Ft. Pickett, VA, to compete in the annual Middle East Region Search and Rescue Competition held recently.

CAP teams from each of the eight states in the region competed in three categories: mission coordination, air search, and ground team search and medical problems.

The South Carolina aircrew team rated third place in the competition and was awarded a trophy for their efforts. Members of the crew were: Captains James L. Barnard, Bradford L. Sipperly and Jacob Y. Smith, III.

Other Civil Air Patrol team members included:

Ground Team — Capt. Joe Melton, 1Lt.s Wayne E. Bassett, Sr. and Jerry A. George, and Cadets Eddie W. Bassett, Jr., and Anna M. Ruggiero.

Mission Coordination Team — Majors Howell A. Jeffords and Cordy M. Williamson, Captains Elmer J. Dalfiume, Jr. and Alan E. Williams and 1Lt. Delores J.V. Rucker.





# Donaldson Center Has Room For Growth

**Donaldson Center Airport is located about six miles south of the central business district of Greenville and five miles east of Mauldin, S.C.**

John Ferguson is a man of many words, and all of those words happen to be about Donaldson Center.

As manager of the airport, Ferguson enjoys promoting the facility and talking about its industrial park.

Located in Greenville County, Donaldson Center Industrial Park occupies over 2,500 acres with the airport comprising over half of the acreage.

Ferguson says the biggest obstacle Donaldson Center has to overcome is its reputation as being a private airport.

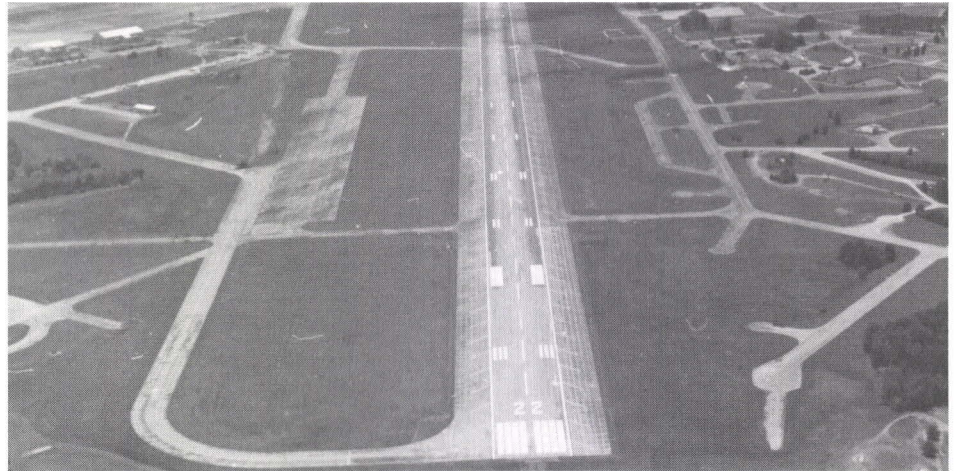
"We are a public field," he said. "We still have a problem with people thinking this is a private field. If there's one thing I'd like to get across it's that anyone can land here."

The businesses around Donaldson reflect the varied services and manufacturing facilities in the Greenville area.

Businesses in the area are varied. The major industry in the park is Lockheed Aeromod which modifies and refurbishes aircraft in their multi-purpose center.

The International Flight Training Center is a flying school working in conjunction with Greenville Technical College. Greenville Tech does the ground school courses and students pick their own flight instructors.

Greenville Tech also has an Airframe and Power Plant School to instruct students on how to work on aircraft and are virtually guaranteed employment in the area. "When they're finished," said Ferguson,



Donaldson Center Industrial Park's Runway 4/ 22.

"every single one of them will be taken in by Lockheed Aeromod."

Donaldson Center did not always have the various businesses in its reach. According to historical records, the airport began as Greenville Air Force Base in 1942, but was renamed for an outstanding local citizen in 1951 to Donaldson Air Force Base. The airport has endured being deactivated twice, threats of closings in 1960 and was permanently closed as an air force base in 1963.

To the delight of Greenville City and County officials, the air base's deed included a reversionary clause providing that if the land ceased to be used as a military base it would automatically revert to the City and County. In January, 1964, Donaldson began operating as a locally-owned facility.

Donaldson has over 8,000 feet of runway, 608,932 square yards of aircraft parking ramps and 4,367 square yards of auto parking.

Ferguson's mission to promote the facility has filtered down to two main goals: "One: push Donaldson as an air cargo facility...We have 18 inch concrete runways and can handle any weight. We feel that we can do air cargo."

Another goal of his is "build-

ing up general aviation traffic. Here we have an 8,000 ft. runway with unpopulated approaches. You don't have to fly through skyscrapers to get to the airport."

In addition, Ferguson said, "Lockheed wants to give up the FBO and we're moving it to the entrance for better access."

Ferguson is outspoken about the airport and has many opinions as to the direction he thinks the facility ought to go. "We'd like to have a new parallel taxiway," he added. "But with only 48 based airplanes, we have to have those first before we can go on."

This month, Donaldson Center is gearing up for their biggest event of the year — Freedom Weekend Aloft which runs Fourth of July weekend, but Ferguson admits the airport does not have to do much. "We are getting ready for it, but there's not much to do. We cut the grass and they bring their own crews to cut it before the shows"

Among all the features Donaldson Center possesses, their gem has to be their golf course.

"We have a nine-hole course right off the approach," said the Auburn graduate. "We see people playing in Spring, Summer and Fall. It's run by two retired air traffic controllers. They do a real good business."



# FYI From the FAA

## *Apply Now for Annual Certificated Flight Instructor And Maintenance Technician Awards*

By David Anderson, Flight Standards District Office, accident prevention specialist

Get ready! It's time again for the Annual Certificated Flight Instructor/ Maintenance Technician of the Year Awards competition.

Each year an effort is made to distinguish the most outstanding flight instructor and the most outstanding maintenance technician in competition known as the Certificated Flight Instructor / Maintenance Technician of the Year Award.

This national effort allows the public to recognize the importance of the roles of maintenance technicians and flight instructors in aviation safety while focusing attention on their vital contributions to general aviation.

The programs are sponsored by the AOPA Air Safety Foundation, General Aviation Manufacturers Association, Helicopter Association International, National Business Aircraft Association, National Air Transportation Association and the Federal Aviation Administration with the support of general aviation industry and associated organizations.

To be eligible for competition, you must be employed in the U.S. as a full-time FAA-certificated aviation mechanic or FCC-licensed technician working on general aviation aircraft or accessories; to be eligible for the flight instructor award you must be employed in the U.S. as an active civilian Certificated Flight Instructor.

Nominees will be judged on the basis of specific achievements and/or sustained superior performance while functioning on the job as an A&P or FCC-technician,

or while functioning as a CFI.

Entries should list as many specific contributions and achievements as possible, but in no case should it be longer than 500 words. Substantiating documentation such as newspaper/magazine articles and related awards may be included. Contributions made by nominees to aviation safety will count heavily in the selection process.

Distribution of entry forms and publicity posters will be made to FBO's, airport managers, maintenance shops, and other strategic locations to include air taxi operators, flight schools and flight service stations. Additionally, application materials will be available during Aviation Accident Prevention Seminars.

Local community Accident Prevention Counselors will also be available to assist during the application process as will pilot examiners, written test examiners, aviation medical examiners and pilot

flight training centers.

The following is the established time frame for the 1988 program:

- June 30 - Deadline for all nominations to be submitted to FAA district offices.

- July 18 - Screening of entries through Oklahoma City completed, selection of district office winners.

- July 19 - Aug. 13 - District office award presented during this time.

We encourage anyone interested in this program to obtain and submit an application at the earliest possible date.

Local winners will receive a certificate from the FAA and special recognition from the South Carolina Aeronautics Commission.

Questions concerning the awards program may be directed to your local Accident Prevention Counselor or the Columbia FSDO (803) 765-5931.

### *FAA Flight Standards District Office Accident Prevention Programs*

The following safety meetings will be conducted by the Carolina FSDO in Columbia.

All meetings listed will be held at 7 p.m.

#### **June 22**

Collision Avoidance  
Operation in National Airspace  
Orangeburg Airport

#### **July 16**

Collision Avoidance  
Flight Service Station Procedures  
Hilton Head Airport

Anyone can request a safety meeting from the FSDO. All that is required is a place to hold the meeting and some audio-visual support -- a VCR and a monitor or a 16mm projector.

FSDO holds presentations on pilot-related information, as well as airport maintenance & safety, aircraft maintenance for mechanics and also the theory of flight. Just call your Accident Prevention Counselor or (803) 765-5931 for your counselor's number.





**SOUTH CAROLINA  
AERONAUTICS COMMISSION**  
P.O. Drawer 1987  
Columbia, SC 29202

BULK RATE  
U.S. POSTAGE  
PAID  
Columbia, S.C.  
PERMIT NO. 75

**This Month...**

## **Inside Palmetto Aviation**

- Donaldson Center has Room to Spare
- Aerial Applicators Keep Themselves Informed
- New Airport Development Engineer Announced
- SC Wing Liaison Officer Retires

... and much, much more!

### **Three New Towers Built Near Twin Lakes Airport**

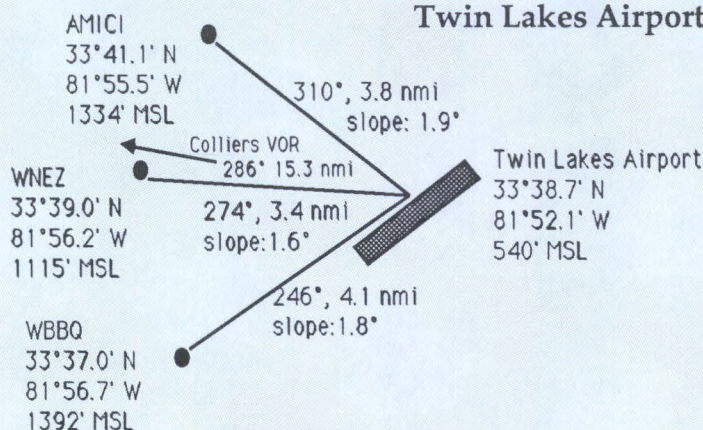
Three new towers have been built near the Twin Lakes Airport in Aiken County which all aviators should be aware of.

The towers, according to a report from Robert M. Girdler, PE, were erected recently and many pilots may not know about them.

Girdler, an avionics and airport nav aids consulting engineer in Aiken, advises that pilots not descend below 2,000 feet mean sea level until entering the traffic pattern as these towers are difficult to see and may not be lighted.

Please be cautious when flying in the Twin Lakes area and avoid these obstructions.

#### **Obstruction Hazard Study Twin Lakes Airport**



**Do Not Descend Below 2000 ft. MSL until entering traffic pattern**

**Towers are difficult to see and may not be lighted**

This publication is printed and distributed by the South Carolina Aeronautics Commission in the interest of aviation safety and to foster growth of responsible aviation in the state. The viewpoints expressed in articles credited to specific sources are presented as the viewpoints of those writers and do not necessarily reflect the opinion of the South Carolina Aeronautics Commission.